OUTPATIENT PHARMACY (OP)

TECHNICAL MANUAL/SECURITY GUIDE

Version 7.0
December 1997

(Revised February 2003)

Department of Veterans Affairs
VIST**A** System Design & Development

Revision History

The table below lists only changes made since the initial release of this manual. Update an existing manual with the Change Pages document or print out the entire updated manual. NOTE ON CHANGE PAGES: The Change Pages document may contain pages that have no changes but are included for two-sided copying. Only revised pages include the patch number in the page footer.

Date	Revised Pages	Patch Number	Description
02/2003	i; 5; 11; 37; 42; 43	PSO*7*116	Updated Revision History. Added PRESCRIPTION REFILL REQUEST file (#52.43) to the Outpatient Pharmacy File List (Section 4.1) and to the File Security List (Section 14.7). Added *Process Internet Refills* option to *Outpatient Pharmacy Manager* menu (Section 15.1) and to the *Pharmacist Menu* (Section 15.2).
12/2002	Title, i – (ii), 13 (14) (41) 42	PSO*7*127	Updated the Title Page and Revision History Page. Added the new routine PSOADDR to the Routine List. Added the new *Patient Address Changes Report* option to the menu diagram.
10/2002	Title, i – iv, 63-72	PSO*7*111	Updated the Title Page, Revision History Page, and Table of Contents pages. Added Appendix B for the new HL7 Messaging with an External System. Included Index due to the page numbers changing. Included pages for double-sided copying.
11/2001	i (ii), 1 (2), 3 (4), 13 (14), 15 (16), 29 (30), (35) 36, 39 (40), 41 (42)	PSO*7*71 PSO*7*80	Added changes related to OP Medication Copay/MillBill. p. i. Updated Revision History page. p. 1. Introduction section revised. p. 3. Orientation - added Copay Release Notes to list of related manuals. p. 13. Routine List - added four new routines. p. 15. Exported Options - added new security key and description. p. 29. External Relations - updated list of other software needed. p. 36. Software Product Security - added new security key and description. p. 39. Outpatient Pharmacy Supervisor Menu Diagrams – revised Copay Menu options and (p. 41) added new Free Text Dosage Report. (Pages in parentheses were not changed but included in this Release Notes document for two-sided copying.)
09/2001	All		Complete revision. Added Revision History Page. Re-formatted the entire manual to meet national and local documentation standards. Added HL7 web address to External Interfaces section. (Sec. 9) Noted that the PSOA PURGE key and Purge options under Archiving are out of order until further notice (Sec. 6.2, 7, and 14. 6). Updated contents to include changes due to previously undocumented patch releases and the Pharmacy Ordering Enhancements (POE) project patch PSO*7*46.

Revision History

Date	Revised Pages	Patch Number	Description
12/97			Original release of V. 7.0 Technical Manual.

3. Implementation and Maintenance

3.1.   Resource Requirements

Outpatient Pharmacy V. 7.0 contains approximately 339 routines including all PSO* routines and compiled templates, PSOX* and APSPT* that take up approximately 1.5MB disk space.

Response Time monitor hooks have been placed in the following routines:

Routine	Purpose
PSON52	File New Prescriptions in File #52
PSORN52	File Renewed Prescriptions in File #52
PSOR52	File Refill Prescriptions in File #52

This package requires 22 files (see "Files" section in this manual). A typical site might require the following disk space:

1 Mbyte	DRUG file (#50) (4000 entries)
3 Mbytes per month	DRUG COST file (#50.9) (800 items dispensed by 200 dispensing physicians)
150 Mbytes	PRESCRIPTION file (#52) (500,000 prescriptions)
50 Mbytes	PHARMACY PATIENT file (#55) (500,000 prescriptions)
about 1 to 2 Mbytes	routines and the other files (except for RX VERIFY file (#52.4), RX SUSPENSE file (#52.5), and PHARMACY ARCHIVE file (#52.8))
3 to 5 Mbytes of "swing space"	RX VERIFY file (#52.4), RX SUSPENSE file (#52.5), and PHARMACY ARCHIVE file (#52.8)

Outpatient Pharmacy might be expected to require about 350 Mbytes of disk space. The actual disk utilization will, of course, depend mainly on the size of the 3 large files - PRESCRIPTION file (#52), PHARMACY PATIENT file (#55) and DRUG COST file (#50.9).

The requirements for Video Display Terminals (VDTs) and printers also depend upon the number of transactions performed by the Outpatient Pharmacy. There should be about 3 VDTs and 1 printer for each 500 prescriptions (or fraction of 500) issued each day. If mail-out refills are handled separately, there should be at least one VDT and one printer for each 500 refills. An additional VDT and printer may be desired in the supervisor's office and one VDT in the office of people who are assigned to consult with patients about their medication regimens.

There are no special device requirements except to print barcodes on labels. In this case, the label printer must be capable of printing barcodes and must be able to be set to a form length of either 4 inches or 24 lines. The section in this document on barcodes provides additional information about this function.

3.2. Options to be Deleted during Installation

NOTE: The options listed below are deleted on the initial installation of Outpatient Pharmacy V. 7.0. No options are deleted after the initial installation up to patch PSO*7*46.

Option Name	Menu Text
PSO DRUG	Drug Enter/Edit
PSO DRUGMENU	Drug/Drug Interaction Functions
PSO HOLDRX	Hold Rx
PSO INTERACTION	Drug Interactions Menu
PSO INTERACTION LOCAL ADD	Enter/Edit Local Drug Interaction
PSO INTERACTION SEVERITY	Edit Drug Interaction Severity
PSO LAB MONITOR	Mark/Unmark Lab Monitor Drugs
PSO NEW	New Prescription Entry
PSO REF	Refill Prescriptions
PSO RXEDIT	Edit Prescriptions
PSO RXHOLD	Hold Features
PSO RXPAR	Partial Prescription
PSO SIGED	Medication Instruction File Add/Edit
PSO UNHOLDRX	Unhold Rx
PSO FACILITY SETUP	Enter Facility Data for Clozapine
PSO MARK DRUG	Mark Clozapine Drug
PSOL UNMARK DRUG	Unmark Clozapine Drug
PSOARCCO	Find
PSOARCHLIST	List One Patient's Archived Rx's
PSOARCIN	Tape Retrieval
PSOARCPURGE	Purge
PSOARCSV	Save

4. Files

This package requires the 22 files listed below. Information about the files can be obtained by using the VA FileMan to generate a list of file attributes.

The Data Dictionaries (DDs) are considered part of the online documentation for this software application. Use the VA FileMan *List File Attributes* [DILIST] option, under the *Data Dictionary Utilities* [DI DDU] option, to print the DDs. The following are the files for which DDs should be printed:

4.1.   Outpatient Pharmacy Files

FILE #	NAME	UP DATE DD	SEND SEC. CODE	DATA COMES W/FILE	SITE DATA	RSLV PTS	USER OVER RIDE
50.073	DUE QUESTIONNAIRE	YES	YES	NO			
50.0731	DUE ANSWER SHEET	YES	YES	NO			
50.0732	DUE QUESTION	YES	YES	NO			
50.0733	DUE SECTION	YES	YES	NO			
50.9	DRUG COST	YES	YES	NO			
52	PRESCRIPTION	YES	YES	NO			
52.11	PATIENT NOTIFICATION (Rx READY)	YES	YES	NO			
52.4	RX VERIFY	YES	YES	NO			
52.41	PENDING OUTPATIENT ORDERS	YES	YES	NO			
52.43	PRESCRIPTION REFILL REQUEST	YES	YES	NO			
52.5	RX SUSPENSE	YES	YES	NO			
52.51	PHARMACY EXTERNAL INTERFACE	YES	NO	NO			
52.52	CLOZAPINE PRESCRIPTION OVERRIDES	YES	YES	NO			
52.8	PHARMACY ARCHIVE	YES	YES	NO			
52.9	PHARMACY PRINTED QUEUE	YES	YES	NO			
53	RX PATIENT STATUS	YES	YES	NO			
59	OUTPATIENT SITE	YES	YES	NO			
59.1	OUTPATIENT AMIS DATA	YES	YES	NO			
59.12	OUTPATIENT PHARMACY MANAGEMENT DATA	YES	YES	NO			
59.2	WAITING TIME	YES	YES	NO			
59.3	GROUP DISPLAY	YES	NO	NO			
59.8	OUTPATIENT CLINIC SORT GROUP	YES	YES	NO			

The namespaces for the Outpatient Pharmacy package are PSO and APSP.

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14.7. File Security

This package requires 22 files in addition to those of the Kernel and other files to which it points, for example the PATIENT file (#2). Information about all files, including these can be obtained by using the VA FileMan to generate a list of file attributes.

File Numbers	File Names	DD	RD	WR	DEL	LAYGO
50.073	DUE QUESTIONNAIRE					
50.0731	DUE ANSWER SHEET					
50.0732	DUE QUESTION					
50.0733	DUE SECTION					
50.9	DRUG COST					
52	PRESCRIPTION					
52.11	PATIENT NOTIFICATION (Rx READY)					
52.4	RX VERIFY	@	@	@	@	@
52.41	PENDING OUTPATIENT ORDERS			@		
52.43	PRESCRIPTION REFILL REQUEST	@	@	@	@	@
52.5	RX SUSPENSE				#	
52.51	PHARMACY EXTERNAL INTERFACE	@	@	@	@	@
52.52	CLOZAPINE PRESCRIPTION OVERRIDES	@	@	@	@	@
52.8	PHARMACY ARCHIVE					
52.9	PHARMACY PRINTED QUEUE					
53	RX PATIENT STATUS					
59	OUTPATIENT SITE					
59.1	OUTPATIENT AMIS DATA	@		@	@	@
59.12	OUTPATIENT PHARMACY MANAGEMENT DATA	@		@	@	@
59.2	WAITING TIME	@	@	@	@	@
59.3	GROUP DISPLAY	@	@	@	@	@
59.8	OUTPATIENT CLINIC SORT GROUP					

> Please refer to Chapter 28 of Kernel V. 8.0 Systems Manual concerning installation of security codes sections entitled "Sending Security Codes."

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Drug Costs by Provider
High Cost Rx Report
Patient Status Costs
Pharmacy Cost Statistics Menu ...
Pharmacy Statistics
Sort Statistics By Division
Provider by Drug Costs
Provider Costs
Request Statistics
Daily AMIS Report
Drug List By Synonym
Free Text Dosage Report
Inactive Drug List
List Prescriptions on Hold
Management Reports Menu ...
Daily Management Report Menu ...
All Reports
Cost of Prescriptions
Count of Prescriptions
Intravenous Admixture
Type of Prescriptions Filled
Date Range Recompile Data
Initialize Daily Compile
Monthly Management Report Menu ...
All Reports
Cost of Prescriptions
Count of Prescriptions
Intravenous Admixture
Type of Prescriptions Filled
One Day Recompile Data
Purge Data
Medication Profile
Monthly Drug Cost
Narcotic Prescription List
Non-Formulary List
Poly Pharmacy Report
Released and Unreleased Prescription Report
Pharmacy Intervention Menu ...
Enter Pharmacy Intervention
Edit Pharmacy Intervention
Print Pharmacy Intervention
Delete Intervention
View Intervention
Process Drug/Drug Interactions
Release Medication
Return Medication to Stock

Rx (Prescriptions) ...
    Patient Prescription Processing
    Barcode Rx Menu ...
        Barcode Batch Prescription Entry
        Check Quality of Barcode
        Process Internet Refills
    Complete Orders from OERR
    Discontinue Prescription(s)
    Edit Prescriptions
    List One Patient's Archived Rx's
    Reprint an Outpatient Rx Label
    View Prescriptions
Supervisor Functions ...
    Add New Providers
    Daily Rx Cost
    Delete a Prescription
    Edit Provider
    Initialize Rx Cost Statistics
    Inter-Divisional Processing
    Inventory
    Lookup Clerk by Code
    Monthly Rx Cost Compilation
    Patient Address Changes Report
    Pharmacist Enter/Edit
    Purge Drug Cost Data
    Recompile AMIS Data
    Site Parameter Enter/Edit
    View Provider
Suspense Functions ...
    Auto-delete from Suspense
    Change Suspense Date
    Count of Suspended Rx's by Day
    Delete Printed Rx's from Suspense
    Log of Suspended Rx's by Day (this Division)
    Print from Suspense File
    Pull Early from Suspense
    Reprint Batches from Suspense
Update Patient Record
Verification ...
    List Non-Verified Scripts
    Non-Verified Counts
    Rx Verification by Clerk

15.2. Pharmacist Menu

Bingo Board User ...
    Enter New Patient
    Display Patient's Name on Monitor
    Remove Patient's Name from Monitor
    Status of Patient's Order
Change Label Printer
Change Suspense Date
DUE Supervisor ...
    1   Enter a New Answer Sheet
    2   Edit an Existing Answer Sheet
    3   Create/Edit a Questionnaire
    4   Batch Print Questionnaires
    5   DUE Report
Enter/Edit Clinic Sort Groups
External Interface Menu …
    Purge External Batches
    Reprint External Batches
    View External Batches
Medication Profile
Pharmacy Intervention Menu ...
    Enter Pharmacy Intervention
    Edit Pharmacy Intervention
    Print Pharmacy Intervention
    Delete Intervention
    View Intervention
Print from Suspense File
Process Drug/Drug/Interaction
Pull Early from Suspense
Release Medication
Return Medication to Stock
Rx (Prescriptions) ...
    Patient Prescription Processing
    Barcode Rx Menu ...
        Barcode Batch Prescription Entry
        Check Quality of Barcode
        Process Internet Refills
    Complete Orders from OERR
    Discontinue Prescription(s)
    List One Patient's Archived Rx's
    Reprint an Outpatient Rx Label
    View Prescriptions
Update Patient Record
Verification ...
    List Non-Verified Scripts
    Non-Verified Counts
    Rx Verification by Clerk

15.3.   Pharmacy Technician's Menu

Bingo Board User ...
    Enter New Patient
    Display Patient's Name on Monitor
    Remove Patient's Name from Monitor
    Status of Patient's Order
Change Label Printer
DUE User ...
    1   Enter a New Answer Sheet
    2   Edit an Existing Answer Sheet
    3   Batch Print Questionnaires
Medication Profile
Patient Prescription Processing
Pull Early from Suspense
Release Medication
    Update Patient Record